

What Is Claimed Is:

1. A liquid crystal display device, comprising:

a liquid crystal display panel;

a plurality of fluorescent lamps formed below the LCD panel extending along a first direction at first fixed intervals along a second direction perpendicular to the first direction;

a case for supporting the plurality of fluorescent lamps;

a plurality of wires attached to the case for absorbing and dissipating heat generated by the plurality of fluorescent lamps; and

wire fixing plates for fixing the plurality of wires on the case.

2. The device according to claim 1, further comprising light-scattering system formed between the liquid crystal display panel and the plurality of fluorescent lamps.

3. The device according to claim 2, wherein the light-scattering system includes:

a diffusion plate for uniformly diffusing the light emitted from the plurality of fluorescent lamps; and

an optical sheet for concentrating the uniformly diffused light in the diffusion plate onto the liquid crystal display panel.

4. The device according to claim 2, further comprising a plurality of supporters for supporting the light-scattering system.

5. The device according to claim 1, further comprising a reflecting plate formed between the plurality of fluorescent lamps and the case for reflecting the light produced by the plurality of fluorescent lamps onto the LCD panel.

6. The according to claim 1, wherein the plurality of wires, the case, and the wire fixing plates are formed of at least one of Al-based and Cu-based material.

7. The device according to claim 1, wherein the plurality of wires are fixed onto the wire fixing plates using one of solder and screws.

8. The device according to claim 1, wherein the plurality of wires are formed between the LCD panel and the plurality of fluorescent lamps.

9. The device according to claim 1, wherein the plurality of wires are formed between the plurality of fluorescent lamps and the case.
10. The device according to claim 1, wherein the plurality of wires extend along the second direction at second fixed intervals along the first direction.
11. The device according to claim 1, wherein the plurality of wires extending along the first direction at the first fixed intervals along the second direction.
12. The device according to claim 1, wherein the plurality of wires extend along a third direction at a first angle within a range between about 0° and about 90° with respect to the first direction.
13. The device according to claim 1, wherein the plurality of wires include:
- a plurality of first wires formed between the liquid crystal display panel and the plurality of fluorescent lamps; and
 - a plurality of second wires formed between the plurality of fluorescent lamps and the case.

14. The device according to claim 13, wherein the plurality of first wires and the plurality of second wires extend along the first direction at the first fixed intervals along the second direction.

15. The device according to claim 14, further comprising a plurality of supporters each disposed between adjacent ones of the plurality of first and second wires.

16. The device according to claim 13, wherein the plurality of first wires and the plurality of second wires overlap each other.

17. The device according to claim 13, wherein the plurality of first wires and the plurality of second wires extend along a third direction at an angle within a range between about 0° and about 90° with respect to the first direction.

18. The device according to claim 17, further comprising a plurality of supporters each disposed between adjacent ones of the plurality of first and second wires.

19. The device according to claim 13, wherein the plurality of first wires extend along the first direction at the first fixed intervals along the second direction and the plurality of second wires extend along the second direction at second fixed intervals along the first direction.

20. The device according to claim 19, further comprising a plurality of supporters each disposed between adjacent ones of the plurality of first and second wires.

21. The device according to claim 13, wherein the wire fixing plates include:

first wire fixing plates for fixing the plurality of first wires on the case; and
second wire fixing plates for fixing the plurality of second wires on the case.

22. The device according to claim 13, wherein the plurality of first wires extend along a third direction at an angle within a range between about 0° and about 90° with respect to the first direction.

23. The device according to claim 22, wherein the plurality of second wires extend along a fourth direction at an angle within a range between about 0° and about 90° with respect to the third direction.

24. The device according to claim 1, wherein the wire fixing plates are fixed on an exterior surface of the case.

25. The device according to claim 1, further comprising a plurality of supporters disposed between the plurality of wires.

26. The device according to claim 25, wherein the plurality supporters have a conical shape.

27. A liquid crystal display device, comprising:

a liquid crystal display panel;

a plurality of fluorescent lamps formed below the LCD panel extending along a first direction at first fixed intervals along a second direction perpendicular to the first direction;

a case for supporting the plurality of fluorescent lamps;

a plurality of first wire fixing plates extending along the first direction and disposed adjacent to the case;

a plurality of second wire fixing plates extending along the second direction and disposed adjacent to the case;

a first plurality of wires attached to the plurality of first wire fixing plates for absorbing and dissipating heat generated by the plurality of fluorescent lamps;

a second plurality of wires attached to a plurality of second wire fixing plates for absorbing and dissipating the heat generated by the plurality of fluorescent lamps; and

a plurality of supporters disposed between the first and second plurality of wires,

wherein the first plurality of wires are formed between the liquid crystal display panel and the plurality of fluorescent lamps and the second plurality of wires are formed between the plurality of fluorescent lamps and the case.

28. The device according to claim 27, wherein the first plurality of wires extend along a third direction at an angle within a range between about 0° and about 90° with respect to the first direction, and the second plurality of wires extend along a fourth direction at an angle within a range between about 0° and about 90° with respect to the third direction.

29. The device according to claim 28, wherein the first plurality of wires are spaced apart by first intervals along the fourth direction, and the second plurality of wires are spaced apart by second intervals along the third direction.

30. The device according to claim 28, wherein end portions of the first plurality of wires are connected to one of the plurality of first wire fixing plates and one of the plurality of second wire fixing plates, and end portions of the second plurality of wires are connected to one of the plurality of first wire fixing plates and one of the plurality of second wire fixing plates

31. The device according to claim 27, wherein the first plurality of wires extend along the second direction and are spaced apart by first intervals along the first direction, and the second plurality of wires extend along the first direction and are spaced apart by second intervals along the second direction.

32. The device according to claim 27, wherein the first and second plurality of wires extend through sidewall portions of the case.

33. A liquid crystal display device, comprising:

a liquid crystal display panel;

a plurality of fluorescent lamps formed below the LCD panel extending along a first direction at first fixed intervals along a second direction perpendicular to the first direction;

a case for supporting the plurality of fluorescent lamps;

a plurality of wire fixing plates extending along the first direction and disposed adjacent to the case;

a first plurality of wires and second plurality of wires attached to the plurality of wire fixing plates for absorbing and dissipating heat generated by the plurality of fluorescent lamps; and

a plurality of supporters disposed between the first and second plurality of wires,

wherein the first plurality of wires are formed between the liquid crystal display panel and the plurality of fluorescent lamps and the second plurality of wires are formed between the plurality of fluorescent lamps and the case.

34. The device according to claim 33, wherein the first plurality of wires are spaced apart by first intervals along the first direction, and the second plurality of wires are spaced apart by second intervals along the first direction.

35. The device according to claim 34, wherein the first plurality of wires are alternately disposed between the second plurality of wires.

36. The device according to claim 34, wherein the first plurality of wires are disposed to overlap the second plurality of wires.

37. The device according to claim 33, wherein the first plurality of wires extend along a third direction at a first angle within a range between about 0° and about 90° with respect to the first direction, and the second plurality of wires extend along a fourth direction at a second angle within a range between about 0° and about 90° with respect to the third direction.

38. The device according to claim 37, wherein the first angle and the second angle are substantially the same.

39. The device according to claim 33, wherein the first and second plurality of wires extend through sidewall portions of the case.

40. The device according to claim 13, wherein diameters of the plurality of second wires are larger than the diameters of the plurality of first wires.